

1635

DOCKET NO.: ISIS-5030

PATENT #3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE *I.D.S.*



In Re Application of:

Stanley T. Crooke

Serial No.: 10/079,185

Group Art Unit: 1635

Filing Date: February 20, 2002

Examiner: Unknown

For: HUMAN RNASE III AND COMPOSITIONS AND USES THEREOF

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DATE OF DEPOSIT: May 20, 2002

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231.

Gwilym J. O. Attwell  
TYPED NAME: Gwilym J. O. Attwell  
REGISTRATION NO.: 45,449

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

- ☒ In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first office action after the filing of request for continued examination under §1.114, no additional fee is required.

- ☐ In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with ☐the first or ☐second After Final Submission, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$180.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, or before an action that otherwise closes prosecution in the application, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$180.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); and the submission fee of \$180.00 as set forth in §1.17(p).
- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- EXCEPT THAT:
- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.

☒ In accordance with §1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. §120 have been made in the instant application:

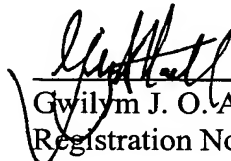
☒ Copies of references **AA-AH, AW, and AX** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. **09/900,425**, filed **July 6, 2001**.

☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.  
This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date: *May 20, 2002*

  
\_\_\_\_\_  
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**Form PTO-1449 Modified**

List of Patent and Publications  
Cited by Applicant  
(Use several sheets if necessary)

U.S. Department of Commerce  
Patent and Trademark Office

Docket No. <b>ISIS-5030</b>	Serial No. <b>10/079,185</b>
Applicant <b>Stanley T. Crooke</b>	
Filing Date <b>February 20, 2002</b>	Group <b>1635</b>

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**U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
	AU	5,804,683	09/08/98	Usman et al.	536	25.31
	AV	5,891,683	04/06/99	Usman et al.	435	91.31
	AW	5,898,031	04/27/99	Crooke	435	172.3
	AX	6,107,094	08/22/00	Crooke	435	455

**FOREIGN PATENT DOCUMENTS**

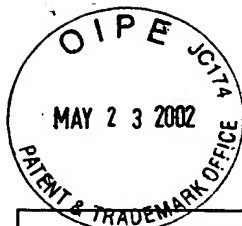
Examiner Initial		Document No.	Date	Country	Translation YES NO	
	AY	WO 92/07065	04/30/92	PCT		

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List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Applicant <b>Stanley T. Crooke</b>	
		Filing Date <b>February 20, 2002</b>	Group <b>1635</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	<b>AL</b>	Hobbs, J. et al., "Polynucleotides Containing 2'-Amino 2'-deoxyribose and 2'-Azido-2'-deoxyribose," <i>Biochem.</i> , <b>1973</b> , <i>12</i> , 5138-5145	
	<b>AM</b>	Hobbs, J. et al., "Poly 2'-Deoxy-2'-Aminouridylic Acid," <i>Biochem Biophys Res Commun</i> <b>1972</b> , <i>46</i> (4), 1509-1515	
	<b>AN</b>	Hobbs, J. et al., "Polynucleotides Containing 2'-Chloro-2'-deoxyribose," <i>Biochem.</i> , Eckstein et al., Ed., <b>1972</b> , <i>11</i> , 4336-4344	
	<b>AO</b>	Pieken, W. et al., "Kinetic Characterization of Ribonuclease-Resistant 2'-Modified Hammerhead Ribozymes," <i>Science</i> , <b>1991</b> , <i>253</i> , 314-317	
	<b>AP</b>	Pilet, J. et al., "Structural parameters of single and double helical polyribonucleotides," <i>Biochem Biophys Res Commun</i> , <b>1973</b> , <i>52</i> (2), 517-523	
	<b>AQ</b>	Rottman, F. et al., "Polynucleotides Containing 2'-O-Methyladenosine. I. Synthesis by Polynucleotide Phosphorylase," <i>Biochem</i> , <b>1968</b> , <i>7</i> , 2634-2641	
	<b>AR</b>	Rottman, F. et al., "Polymers Containing 2'-O-Methylnucleotides. II. Synthesis of Heteropolymers," <i>Biochem</i> , <b>1969</b> , <i>8</i> (11), 4354-4361	
	<b>AS</b>	Wincott et al., "Synthesis, deprotection, analysis and purification of RNA and ribozymes," <i>Nucl. Acids Res.</i> , <b>1995</b> , <i>23</i> (14), 2677-2684	
	<b>AT</b>	Zmudzka, B. et al., "Poly 2'-O-methylcytidylic acid and the role of the 2'-hydroxyl in polynucleotide structure," <i>Biochem Biophys Res Commun</i> , <b>1969</b> , <i>37</i> (6), 895-901	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	



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Sheet 1 of 3

<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>ISIS-5030</b>	Serial No. <b>10/079,185</b>
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
AA	Chanfreau et al., "Alternative 3' -end processing of U5 snRNA by Rnase III," <i>Genes and Devel.</i> , 1997, 11, 2741-2751	
AB	Court, D., "RNA Processing and Degradation by Rnase III," <i>Control of Messenger RNA Stability</i> , 1993, Academic Press, Inc., Belasco and Brawerman, eds., 71-116	
AC	Elbashir et al., "RNA interference is mediated by 21-and 22-nucleotide RNAs," <i>Genes and Devel.</i> , 2001, 15, 188-200	
AD	Elbashir et al., "Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells," <i>Nature</i> , 2001, 411, 494-498	
AE	Elela et al., "Rnase III Cleaves Eukaryotic Preribosomal RNA at a U3 snoRNP-Dependent Site," <i>Cell</i> , 1996, 85, 115-124	
AF	Mian, I. S., "Comparative sequence analysis of ribonucleases HII, III, II, PH and D," <i>Nucleic Acids Res</i> , 1997, 25, 3187-3195	
AG	Qu et al., "Seven Novel Methylation Guide Small Nucleolar RNAs are Processed from a Common Polycistronic Transcript by Rat1p and Rnase III in Yeast," <i>Mol Cell Biol</i> , 1999, 19(2), 1144-1158	
AH	Wu et al., "Identification and Partial Purification of Human Double Strand Rnase Activity," <i>J Biol Chem</i> , 1998, 273(5), 2532-2542	
AI	Arya, S. K. et al., "Inhibition of RNA Directed DNA Polymerase of Murine Leukemia Virus by 2'-O-Alkylated Polyadenylic Acids," <i>Biochem Biophys Res Commun</i> , 1974, 59(2), 608-615	
AJ	Arya, S. K. et al., "Inhibition of Synthesis of Murine Leukemia Virus in Cultured Cells by Polyribonucleotides and Their 2'-O-Alkyl Derivatives," <i>Molecular Pharmacology</i> , 1976, 12, 234-241	
AK	DeClercq, E. et al., "Influence of various 2- and 2'-substituted polyadenyl acids on murine leukemia virus reverse transcriptase," <i>Cancer Letters</i> , 1979, 7, 27-37	

EXAMINER	DATE CONSIDERED
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